

CLAIMS

1. (Currently amended.) A fuel composition consisting essentially of a petroleum-based liquid hydrocarbon fuel in admixture with a [[A]] fuel additive composition comprising 5-95% of a lithium aromatic sulfonate and an organic peroxide compatible with the fuel, wherein the fuel additive is present in an amount relative to the amount of fuel effective to achieve improved combustion of the fuel.
2. (Currently amended.) The fuel additive composition of claim 1, wherein the composition additive is provided in a solvent-based system.
3. (Currently amended.) The fuel additive composition of claim 1, wherein there are the additive includes two organic peroxides.
4. (Currently amended.) The fuel additive composition of claim 3, wherein one peroxide is tert-butyl perbenzoate.
5. (Currently amended.) The fuel additive composition of claim 3, wherein one peroxide is 2-butanone peroxide.
6. (Currently amended.) The fuel additive composition of claim 1, wherein the lithium aromatic sulfonate is a C₇₋₃₅ alkylbenzenesulfonate.
7. (Currently amended.) The fuel additive composition of claim 1, wherein the lithium aromatic sulfonate is didodecylbenzene sulfonate.

8. (Currently amended.) The fuel additive composition of claim 2, wherein the solvent is diphenyl.

9. (Cancelled.)

10. (Currently amended.) The fuel composition of ~~claim 9~~ claim 1, wherein the liquid hydrocarbon fuel is gasoline.

11. (Currently amended.) The fuel composition of ~~claim 9~~ claim 1, wherein the liquid hydrocarbon fuel is diesel.

12. (Currently amended.) A method for improving the operating operation of a gasoline-powered, artificial ignition, internal combustion engine, comprising providing to said engine a fuel composition comprising consisting essentially of gasoline and a fuel additive comprising a mixture of a lithium aromatic sulfonate and organic peroxide, wherein the additive is present in an amount effective to improve the combustion of the gasoline.

13. (Currently amended.) The method of claim 12, wherein the fuel additive additive is provided in a solvent-based system miscible with said gasoline fuel.

14. (Original) The method of claim 12, wherein the fuel comprises from 1 to 100 parts by weight of additive to 10,000 parts by weight of fuel.

15. (New.) The fuel composition of claim 1, wherein the liquid hydrocarbon fuel is heating oil.

16. (New.) The fuel composition of claim 1, wherein the organic peroxide is *tert*-butyl peroxide.

17. (New.) The fuel composition of claim 1, wherein the organic peroxide is methyl ethyl ketone peroxide.